AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An aircraft navigation aid method comprising the following steps:

a) computing a feeler line ground path, wherein the feeler line ground path is a ground path that an aircraft would follow if a turn at the maximum rate applicable to the current flight phase of the aircraft were to begin at that instant; and

b) displaying on a navigation screen both the feeler line ground path and a ground path to be captured, in order to determine how to place the aircraft in a turn in order to optimize the capture of the path to be captured.

2. (Previously Presented) The method as claimed in claim 1, comprising: giving a turn command when the feeler line is tangential to the ground path to be captured.

3. (Previously Presented) The method as claimed in claim 1, wherein each computation and/or display and/or conditional turn command step is controlled automatically or by the pilot of the aircraft.

4. (Previously Presented) The method as claimed in claim 1, wherein a form of a right feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\,t + D_v\right]\sin d\ !\,!' \\ y = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\,t + D_v\right]\cos d\ !\,!' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d being the drift angle.

5. (Previously Presented) The method as claimed in claim 1, wherein a form of a left feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1-\cos(t\,\dot{\theta})] + V_x\, t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\, t + D_v\right]\sin d \; l\, l' \\ y = \left[R_{air}[1-\cos(t\,\dot{\theta})] + V_x\, t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\, t + D_v\right]\cos d \; l\, l' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d the drift angle.

6. (Currently Amended) An onboard aircraft navigation aid device comprising at least a program memory and a user interface, comprising: a program memory having a feeler line computation program, for computing a feeler line ground path, wherein the feeler line ground path is the ground path that the aircraft would follow if a turn at the maximum rate applicable to the current flight phase of the aircraft were to begin at that instant, and a program for displaying on the user interface a path to be captured and the feeler line ground path.

7. (Previously Presented) The device as claimed in claim 6, wherein the user interface comprises means of controlling the computation of the feeler line.

8. (Previously Presented) The device as claimed in claim 7, wherein the user interface also comprises means of controlling the display of the feeler line.

9. (Previously Presented) The method as claimed in claim 2, wherein each computation and/or display and/or conditional turn command step is controlled automatically or by the pilot of the aircraft.

10. (Previously Presented) The method as claimed in claim 2, wherein a form of a right feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1-\cos(t\,\dot{\theta})] + V_x\ t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\sin d\ l\ l' \\ y = \left[R_{air}[1-\cos(t\,\dot{\theta})] + V_x\ t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\cos d\ l\ l' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d being the drift angle.

11. (Previously Presented) The method as claimed in claim 3, wherein a form of a right feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1-\cos(t\,\dot{\theta})] + V_x\ t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\sin d\ l\ l' \\ y = \left[R_{air}[1-\cos(t\,\dot{\theta})] + V_x\ t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\cos d\ l\ l' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d being the drift angle.

12. (Previously Presented) The method as claimed in claim 2, wherein a form of a left feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\,t + D_v\right]\sin d\ l\ l' \\ y = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\,t + D_v\right]\cos d\ l\ l' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d the drift angle.

13. (Previously Presented) The method as claimed in claim 3, wherein a form of a left feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\,t + D_v\right]\sin d\ l\ l' \\ y = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\,t + D_v\right]\cos d\ l\ l' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d the drift angle.

14. (Currently Amended) An aircraft navigation aid method comprising the following steps:

a) computing a feeler line ground path, wherein the feeler line ground path is a ground path that an aircraft would follow if a turn at the maximum rate applicable to the current flight phase of the aircraft were to begin at that instant; and

b) displaying on a navigation screen both the feeler line ground path and a ground path to be captured, in order to determine how to place the aircraft in a turn in order to optimize the capture of the path to be captured, wherein a form of a right feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\sin d\ l\ l' \\ y = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\cos d\ l\ l' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d being the drift angle.

15. (Previously Presented) An aircraft navigation aid method comprising the following steps:

a) computing a feeler line ground path , wherein the feeler line ground path is a ground path that an aircraft would follow if a turn at the maximum rate applicable to the current flight phase of the aircraft were to begin at that instant; and

b) displaying on a navigation screen both the feeler line ground path and a ground path to be captured, in order to determine how to place the aircraft in a turn in order to optimize the capture of the path to be captured, wherein a form of a left feeler line is given by a parametric equation of the form:

$$\begin{cases} x = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\cos d - \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\sin d\ l\ l' \\ y = \left[R_{air}[1 - \cos(t\,\dot{\theta})] + V_x\ t\right]\sin d + \left[R_{air}\sin\left(t\,\dot{\theta}\right) + V_y\ t + D_v\right]\cos d\ l\ l' \end{cases}$$

R_{air} being the radius of the turn that the airplane would have without wind, $\dot{\theta}$ being the angular speed of the airplane in the air during the turn that the airplane would have without wind, V_x and V_y being the components of the wind speed vector, t being the time with t = 0 at the start of the turn, D_v being the distance to the turn and d being the drift angle.